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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/761,029 | 01/19/2004 | Stephen Fife Sheldon | 11378 | 1869 |

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John D. Cowart
Teradata Law IP, WHQ-4W
NCR Corporation
1700 S. Patterson Blvd.
Dayton, OH 45479-0001

06/13/2007

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| EXAMINER |
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KINDRED, ALFORD W

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| ART UNIT | PAPER NUMBER |
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2163

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06/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/761,029 | Applicant(s) SHELDON ET AL. | |
| | Examiner Alford W. Kindred | Art Unit 2163 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 03/30/07.

This action is made final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Goel et al., US# 5,960,427.

As per claim 1, Goel et al. teaches "identifying one or more groups of consecutive values in the set" (see fig. 5, and col. 5, lines 50-67) "removing equality conditions corresponding to the values in one or more of the identified groups; and adding one or more inequality conditions corresponding to the one or more of the identified groups" (see col. 13, lines 11-38).

As per claim 2, Goel et al. teaches "checking whether the database column is a non-indexed column" (see col. 9, lines 47-60 and col. 10, lines 13-43).

As per claim 3, Goel et al. teaches "checking whether the set of values includes only literal discrete values" (see abstract, col. 3, lines 35-45 and col. 10, lines 10-24).

As per claim 4, Goel et al. teaches "whether the set contains more values than a specified lower limit" (see col. 10, lines 10-23 and col. 14, lines 60-67).

As per claim 5, Goel et al. teaches "identifying the non-overlapping groups with the largest numbers of consecutive values" (see col. 5, lines 45-67 and col. 13, lines 10-36).

AS per claims 6-9, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-5 and are similarly rejected.

As per claims 10-18, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-10 and are similarly rejected.

As per claims 19-27, these claims are rejected on grounds corresponding to the arguments given above for rejected claims 1-10 and are similarly rejected including the following:

- Goel et al. teaches "a plurality of virtual process . . . rows organized in tables, an optimizer . . ." (see col. 10, lines 26-57 and col. col. 13, lines 33-51).

Response to Arguments

4. Applicant's arguments filed 3/30/06 have been fully considered but they are not persuasive.

--As per applicant's arguments regarding "Goel does not teach or suggest identifying one or more groups of consecutive values in a set, where the 'set' is a set of values that is linked to a database column by multiple alternative equality conditions in a query", examiner disagrees and maintains that Goel's teachings involving the transforming Groupby, is illustrative of grouping values that are related to a database

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column by conditions (both alternative as well as normal) in a query as indicated in applicant's claim language.

--As per applicant's arguments regarding "Goel et al. do not teach or suggest . . .

The GROUPBY operator is part of a query and does not describe an operation that occurs before the query is executed . . .", examiner disagrees and maintains that Goel's "GROUPBY" operator, although a part of a query, is used to optimize a query by using a GROUBY element as indicated in applicant's claim language.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

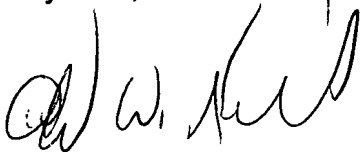
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alford W. Kindred whose telephone number is 571-272-4037. The examiner can normally be reached on Mon-Fri 9:00 am- 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Alford W. Kindred
Patent Examiner
Tech Ctr. 2100